

ABSTRACT

A method for forming, without heat evolution, an organic thin film with homogeneous quality on the surface of the substrate.

The method consists of vaporizing a single film-forming component of organic material, thereby evolving a film-forming gas (g2), transporting and feeding the film-forming gas (g2) into a reaction chamber (11) in which a substrate (W) is placed, and depositing the organic material, while keeping the film-forming component, on the surface of the substrate (W) in the reaction chamber (11). The substrate (W) is kept cooled while the organic material is being deposited. The film-forming gas (g2) is transported and fed into the reaction chamber (11) by using a carrier gas, such as an inert gas (g1). The deposition of the organic material is repeated so that films differing in composition are formed one over another.